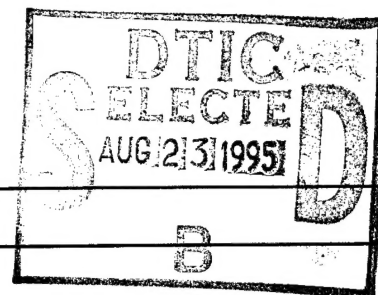


UNCLASSIFIED

Security Classification This Page

REPORT DOCUMENTATION PAGE



1. Report Security Classification: UNCLASSIFIED			
2. Security Classification Authority:			
3. Declassification/Downgrading Schedule:			
4. Distribution/Availability of Report: DISTRIBUTION STATEMENT A: APPROVED FOR PUBLIC RELEASE; DISTRIBUTION IS UNLIMITED.			
5. Name of Performing Organization: JOINT MILITARY OPERATIONS DEPARTMENT			
6. Office Symbol: C		7. Address: NAVAL WAR COLLEGE 686 CUSHING ROAD NEWPORT, RI 02841-1207	
8. Title (Include Security Classification): IN LIMITED WAR - VICTORY BEFORE THE CULMINATING POINT (U)			
9. Personal Authors: FRANK P. JANECEK, COL, USA			
10. Type of Report: FINAL		11. Date of Report: 16 MAY 1995	
12. Page Count: 16			
13. Supplementary Notation: A paper submitted to the Faculty of the NWC in partial satisfaction of the requirements of the JMO Department. The contents of this paper reflect my own personal views and are not necessarily endorsed by the NWC or the Department of the Navy.			
14. Ten key words that relate to your paper: LIMITED WAR, CULMINATING POINT, SUCCESS, VICTORY, CAMPAIGN PLANNING, ENEMY DEFEAT			
15. Abstract: THERE IS A CONSENSUS THAT MOST WARS OF THE FUTURE WILL BE LIMITED WARS. WHEN WARRING PARTIES PASS THEIR CULMINATING POINT LIMITED WARS CAN BECOME PROTRACTED AND ATTRITIONAL IN NATURE. AS NEITHER SIDE GIVES IN, EACH HOPING TO DRIVE THE OPPONENT PAST HIS CULMINATING POINT, STALEMATE OR ULTIMATE DEFEAT BECOMES A REAL POSSIBILITY. THUS, WINNING LIMITED WARS WILL BE OUR BIGGEST CHALLENGE IN THE FUTURE, AND AS WE SAW IN VIETNAM, DEFEAT OF THE ENEMY ON THE BATTLEFIELD DOES NOT ENSURE SUCCESS. A REVIEW OF THE AUSTRO-PRUSSIAN WAR OF 1866, THE KOREAN WAR, AND DESERT SHIELD/DESERT STORM PROVIDE INSIGHTS INTO LIMITED WAR FUNDAMENTALS AND CAMPAIGN DESIGN PROVEN TO ACHIEVE VICTORY. LIMITED WAR FUNDAMENTALS CONSIDERED ARE: ISOLATE YOUR ADVERSARY POLITICALLY; ESTABLISH FIRM POLITICAL CONTROL OVER THE MILITARY; ESTABLISH AND MAINTAIN LIMITED OBJECTIVES EVEN IN THE FACE OF OVERWHELMING VICTORY; AND ACHIEVE QUICK MILITARY VICTORY. A SUCCESSFUL CAMPAIGN DESIGN IS ONE THAT THREATENS THE SURVIVAL OF THE OPPOSING STATE WITHOUT ACTUALLY CAUSING HIS DESTRUCTION. THE CAMPAIGN DESIGN THAT FORCES THE ENEMY LEADER TO CHOOSE BETWEEN COLLAPSE OF HIS REGIME OR A SETTLEMENT IS THE SUREST WAY TO ACHIEVE VICTORY.			
16. Distribution / Availability of Abstract:	Unclassified X	Same As Rpt	DTIC Users
18. Abstract Security Classification: UNCLASSIFIED			
19. Name of Responsible Individual: CHAIRMAN, JOINT MILITARY OPERATIONS DEPARTMENT			
20. Telephone: 841-6457		21. Office Symbol: C	

Security Classification of This Page Unclassified

(Unclassified Paper)

NAVAL WAR COLLEGE
Newport, R.I.

IN LIMITED WAR - VICTORY BEFORE THE CULMINATING POINT


by

Frank P. Janecek

COL. U.S. Army

A paper submitted to the Faculty of the Naval War College in partial satisfaction of the requirements of the Department of Operations.

The contents of this paper reflect my own personal views and are not necessarily endorsed by the Naval War College or the Department of the Navy.

Signature: 

16 May 1995

Paper directed by Captain D. Watson
Chairman, Joint Military Operations Department


Faculty Advisor 16 May 1995
Date

19950822 127

Abstract of

IN LIMITED WAR - VICTORY BEFORE THE CULMINATING POINT

There is a consensus that most wars of the future will be limited wars. When warring parties pass their culminating point limited wars can become protracted and attritional in nature. As neither side gives in, each hoping to drive the opponent past his culminating point of victory, stalemate or ultimate defeat becomes a real possibility. Thus, winning limited wars will be our biggest challenge in the future, and as we saw in Vietnam, defeat of the enemy on the battlefield does not ensure success. A review of the Austro - Prussian war of 1866, the Korean War, and Desert Shield/Desert Storm provide insights into limited war fundamentals and campaign design proven to achieve victory. Limited war fundamentals considered are: isolate your adversary politically; establish firm political control over the military; establish and maintain limited objectives even in the face of overwhelming victory; and achieve quick military victory. A successful campaign design is one that threatens the survival of the opposing state without actually causing his destruction. The campaign design that forces the enemy leader to choose between collapse of his regime or a settlement is the surest way to achieve victory.

Accession For	
WHIS GRA&I	<input checked="checked" type="checkbox"/>
DTIC TAB	<input type="checkbox"/>
Unannounced	<input type="checkbox"/>
Justification	
By	
Distribution/	
Availability Codes	
Dist	Avail and/or Special
A-1	

IN LIMITED WAR - VICTORY BEFORE THE CULMINATING POINT

There is a consensus that most wars of the future will be limited wars -- limited in scope, objective, means used and ends sought. Limited wars can become protracted in duration and therefore attritional in nature, as neither side gives in, each hoping to drive the opponent past his culminating point and thus to stalemate or ultimate defeat. Winning limited wars will be our biggest challenge in the future, and as we saw in Vietnam, defeat of the enemy on the battlefield does not ensure success. One proven way to achieve victory is to design a campaign that threatens the survival of the opposing state without actually causing his destruction. The campaign design that forces the enemy leader to choose between collapse of his regime or a settlement is the surest way to victory.

Limited wars are by their very nature political wars. Victory is established by the politicians and the end sought is not necessarily defeat of the enemy's army, although defeat of the army often occurs as a means to achieve success. Rather, victory will be regional hegemony, control of land or people, control of markets and natural resources or a combination of the above. Defeat of the enemy's army may be just one step on the path to achieve victory. Victory for the politician will be different from victory for the military force. The military force achieves objectives and establishes conditions that allow the politician to achieve victory. "The political object is the goal, war is the means of reaching it, and means can never be considered in isolation from their purpose."¹ It is therefore essential that the

¹Carl Von Clausewitz, On War (Princeton, NJ: Princeton University Press, 1984), p. 87.

military commander understands the politician's definition of victory. With that understanding he can properly choose the military objectives.

Limited wars become an exercise in escalation control. As each side seeks to defeat the enemy there is a temptation to use ever more violent means to achieve victory. Clausewitz says war in theory could ultimately go to extremes of violence, unchecked by reason or thought. However, there are a number of reasons violence does not usurp policy. "We see, therefore, that war is not merely an act of policy but a true political instrument, a continuation of political intercourse, carried on with other means."² Politics and policy control violence and escalation.

"Five motives - singly or in combination - offer most of the explanation:

First, governments tend to refrain from escalating a war if they expect that the military gains of increased violence would be canceled by the enemy's counter-escalation....

Second, war efforts tend to be limited by fear that an increase in violence might ... bring about a further eruptive expansion of the fighting to intolerably costly and destructive levels....

Third, governments may fear that an escalation of fighting would inflict destruction and death on their own territory.

Fourth, governments wish to avoid internal dissension and keep down the economic cost and social dislocation

Fifth, military capacity is sometimes left unused in a local war as a reserve for coping with other potentially menacing powers."³

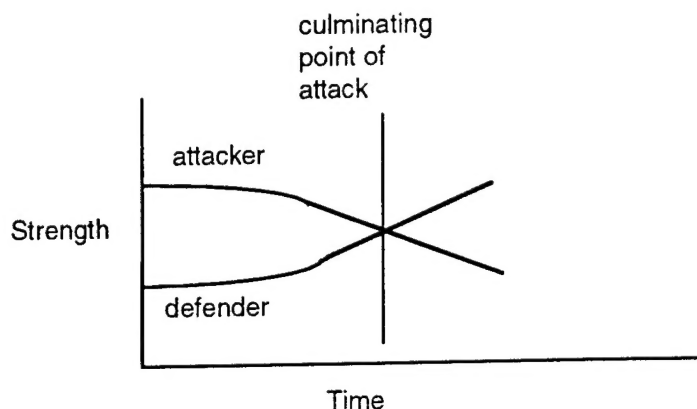
For these reasons violence and escalation do not go unchecked.

Using the concept of culminating points is essential in planning all battles and campaigns. During the battle and campaign there are certain points in time and space where force ratios and combat power change relative to the enemy. The point where the offense loses sufficient strength to continue the attack and

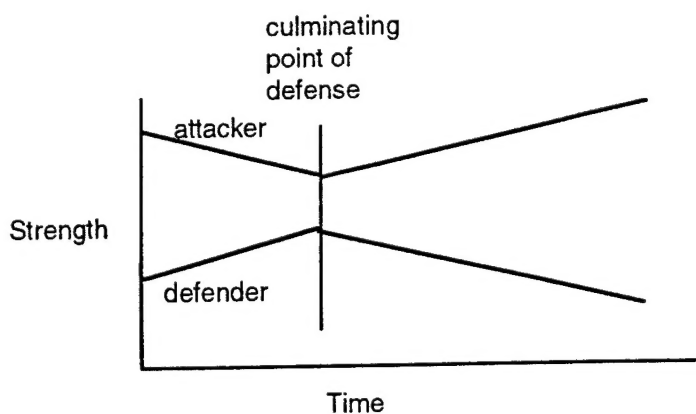
²Ibid.

³Fred Charles Ikle, Every War Must End (New York: Columbia University Press, 1971), p. 40.

must convert to the defense is called the culminating point of the attack. A graphical representation of this concept is presented below. The curves and specific culminating points will differ for every combatant and situation. However, the graphic presented is for illustrative purposes.



Likewise for the defender there comes a point where his relative strength is at a peak and delaying action only results in a worsening of his position. So for the defender the point where time is no longer on his side, where his strength starts to decline faster than the attacker, becomes his culminating point of the defense. At this point the defender must attack or concede since his force ratios are at their best relative to the attacker. The following graphic depicts this concept.



Therefore, achieving success before reaching the culminating point is essential. The culminating point is not fixed in time but can be controlled. Control of the

tempo of battle, use of operational pauses, advanced logistic basing, and phasing of operations are some of the more common methods of delaying the culminating point.⁴ Campaign design must consider culminating points. The challenge is to design the campaign such that you force the enemy to culmination and then place him in a position where he will negotiate and come to terms because he believes defeat is inevitable or if he continues he faces loss of his regime. The idea that you want to force the enemy to culmination before you is fundamental.

One way to force the enemy past his culminating point is to destroy his centers of gravity, attack and reduce his sources of strength. Joint Pub 3-0 identifies direct attack on the enemy center of gravity as a part of achieving decisive advantages early. The center of gravity is the source of strength and exists at each level of war, strategic, operational and tactical. There may be more than one center of gravity, and it can be tangible such as the army's main force or as nebulous as the will of the people. In recent years it has become the norm to attempt to identify the enemy's centers of gravity and then target those centers for destruction. There are several purposes for attacking the center of gravity. Joint Pub 3-0 states that attacks on the center of gravity may be decisive and if not they can cause paralysis and destroy cohesion.⁵ What has been missing from doctrine is the reason for or result desired from attacking the center of gravity other than a belief that its general destruction will result in victory.

To understand how to achieve victory in limited wars consider several historical examples. First, the Austro - Prussian War of 1866 that pitted Von

⁴Joint Pub 3-0, Doctrine For Joint Operations (U.S. government Printing Office, 1993), p. III-29.

⁵Ibid. p. IV-8.

Moltke's Prussian armies under the political leadership of King Wilhelm and Otto Von Bismarck against the Austrian forces of Emperor Franz Joseph and the Hapsburg regime. After intense political maneuvering by the Prussians, Italians, Austrians, French and Russians, the Austrians declared war, and in the ensuing rush to mobilization Von Moltke brought converging force together conducting a series of engagements over three days prior to the battle of Königgrätz. On July 3, the battle of Königgrätz resulted in a resounding defeat of Austrian forces and subsequent peace on the terms Bismarck offered. Out of this campaign Bismarck's fundamentals of limited war, that were developed in the previous Schleswig-Holstein War of 1863-1864, proved to be effective. These fundamentals were: isolate your adversary politically; establish firm political control over the military; establish and maintain limited objectives even in the face of overwhelming victory; and achieve quick military victory.

Conditions were achieved on the battlefield of Königgrätz that led to a prompt settlement. Even though Austrian forces had been defeated, they could have continued the war in defense of Vienna. However, defeat of Austrian forces was such that a continuation of the war could have led to an overthrow of the Hapsburg dynasty. The Emperor felt threatened that future military defeats would create conditions that would permit a peoples' revolution as had occurred in France at the turn of the century. Military victory at Königgrätz and the Prussian army's march to the Danube created a threat to the survival of the Austrian state that resulted in a willingness to come to terms quickly. And since the terms were not excessively onerous nor territorial at the expense of Austria, they were acceptable. King Wilhelm, Von Moltke and Bismarck achieved victory long before the Prussian army reached its culminating point.

Another example worth examining is the Korean War. On 25 June 1950, North Korean forces launched a massive surprise attack to defeat South Korean forces, throw United States forces off the peninsula and unite the country under the communist regime of Kim Il Sung. South Korean and United States forces were initially overwhelmed and fought a delaying action ending in a relatively small foothold around Pusan. However, Kim Il Sung misjudged the United States response that was to quickly make a major commitment and rally United Nations support to restore the status quo ante bellum. With United States forces on the verge of total defeat, General MacArthur conducted a surprise amphibious landing at Inchon in mid September that completely unbalanced the North Korean attack. General MacArthur correctly judged that North Korean forces exceeded their culminating point of attack and subsequently the North Korean army was routed and forced to withdraw north of the 38th parallel.

General MacArthur was not satisfied with the stated objective of restoring the status quo ante bellum. When North Korea failed to negotiate, General MacArthur, authorized by President Truman in NSC-81 and with the support of the United Nations, continued the attack crossing the 38th parallel on 9 October 1950⁶ to destroy the North Korean armed forces. Re-unification of North and South Korea on terms dictated by the United States was an implied goal. The political objectives of the war had changed as reflected in MacArthur's statement "Unless and until the enemy capitulates, I regard all of Korea open for our military operations."⁷ MacArthur's subsequent attacks almost to the Chinese border

⁶Callum A. MacDonald, Korea The War Before Vietnam (New York: The Free Press, 1986), p. 55.

⁷Ibid., p. 50.

exceeded the culminating point of attack for United States and allied forces. When China entered the war committing major forces in a surprise massive counter attack in late November 1950, United States and allied forces were outnumbered and reverted to the defense as they were forced back down the Korean peninsula. By February 1951 the United States had stabilized the front and again regained the offense. After pushing the Chinese and North Korean forces north of the 38th parallel, United States forces ceased offensive actions and instead sought a truce and peace through negotiations. It was at this point the war changed from one of decision to one of stalemate. Without military pressure on Chinese forces the communists felt no pressure to negotiate. From March 1951 until the armistice was signed on 27 July 1952 the war was essentially a stalemate. "The war had cost the United States 142,091 casualties and had ended in a draw. For the first time in its history, America had failed to leave the battlefield victorious."⁸ The lessons of WW I and WW II were that war for the United States would always be total war. From the Korean war forward, war has become limited with all the associated problems and restrictions both military and political.

The final example for consideration is the Iraqi invasion of Kuwait and Operations Desert Shield and Desert Storm. Iraq's attack to seize and annex Kuwait on 2 August 1990 was an example of a successful climactic battle that ultimately failed to achieve its objectives. In the initial battle Iraq was successful while in later battles allied forces were victorious. Iraq's leader, Saddam Hussein, did not understand nor apply the lessons of Bismarck in conducting limited war. Had his goal been regional hegemony without territorial gain he could have easily achieved that goal. By defeating Kuwait's military and then withdrawing from

⁸Ibid., p. 198.

Kuwait he would have achieved a measure of control over Kuwait such that Kuwait became a satellite state of Iraq, much as the Eastern European countries were satellites of the Soviet Union during the cold war. Iraq could have become the protector of Kuwait rather than the dictator. However, Saddam Hussein did not seek a political settlement, he thought military victory and conquest were ends in and of themselves. After the initial military victory, Iraq reverted to the defense thereby ceding the initiative to the United States. As the United States massed forces in Saudi Arabia, Iraq passed its culminating point without achieving a political settlement nor ultimate victory.

United States forces deployed to Saudi Arabia to establish a protective shield for that important ally. President Bush established United States objectives in an address to the nation on August 8, 1990. "Four simple principles guide our policy," he said. "First, we seek the immediate, unconditional and complete withdrawal of all Iraqi forces from Kuwait. Second, Kuwait's legitimate government must be restored to replace the puppet regime. And third, my administration, as has been the case with every president from President Roosevelt to President Reagan, is committed to the security and stability of the Persian Gulf. And fourth, I am determined to protect the lives of American citizens abroad."⁹ Then, over a six month period United States and allied nations massed sufficient force to defeat Iraq in a 25 day air campaign followed by a four day ground offensive that ejected Iraqi forces from Kuwait, defeated Iraq's famed Republican Guard, and threatened the survival of Saddam Hussein's government by direct military assault on Baghdad and internal revolt by the Kurds. Saddam Hussein accepted the peace settlement and terms offered. By accepting peace when he did, he retained sufficient force to

⁹Harry G. Summers, Jr., On Strategy II A Critical Analysis of the Gulf War (New York: Dell Publishing, 1992), p. 173.

quell the internal revolt that threatened his rule. Settlement was in his interest. The United States led coalition did not succumb to cries to enlarge the objectives and march on Baghdad. The United States practiced Bismarck's fundamentals of limited war perfectly.

The common thread between these diverse wars was the establishment of a theory of victory. The theory of victory was evident in the clear political purpose achieved by the application of military power. The theory of victory linked battlefield activities to the political objective. There are many theories of victory. In analyzing a theory of victory, it is useful to look at events in a prewar context, during the war's prosecution, and on war termination to include the military and political dimension of the conflict. Bismarck's limited war model is a near perfect tool.

Prewar activities should isolate the adversary politically, strip him of external support, subject him to world condemnation and sanction as well as neutralize his supporting alliances while strengthening ours. Receiving United Nations support provides the moral high ground and authorizes the use of force to achieve our objectives.

Firm political control over the military must be established from prewar activities through war termination. Civil military relations must be strong ensuring the military does not go off on its own whenever it is victorious. It took all the skill that Bismarck could muster to control Von Moltke and the Prussian military that wanted to exploit success and capture Vienna. If this had occurred the war might have widened and the ultimate settlement may not have been favored Prussia. Firm civilian control of the military instrument was a problem with General MacArthur in Korea when he drove political policy from the war zone. Ultimately his battlefield independence cost him his job. Political control over the military is

essential and must be established before the war and exercised during the war's prosecution.

Establishing and maintaining limited objectives starts in the prewar period and extends throughout the conflict. When the force meets with rapid success, it is easy to increase the objective, always seeking a little more. It is at just such a time during the war's prosecution and when entering the war termination phase that adherence to the initial limited objective is critical. Here political control of the military is essential to prevent mission creep and to prevent the aura of success from leading the military to seek ever greater objectives.

The limited war fundamental of achieving a quick military victory places the enemy at a great disadvantage. After a quick victory, settlement may be the best alternative for the losing country. Initial victory builds confidence for the victor while reducing the morale of the loser. Recovery and subsequent victory is difficult to achieve after suffering initial defeat. A quick decisive victory is created by many practices. The following list identifies some of the most obvious factors: use of proper doctrine, appropriate strategy, proper selection and sizing of the force, maintaining a highly trained force, applying the principles of war, and designing the campaign to achieve military conditions that meet the political goals are a few of the practices often leading to victory. Plans for quick decisive victory are developed prewar, implemented during war prosecution, and continued on war termination to achieve and maintain the political settlement.

That leads us to identification of termination objectives and conditions for success. Before forces are committed the military commander must know the political objective and how the political leaders intend to settle the conflict. Termination objectives must be understood to ensure the military objectives will

lead directly to and achieve the desired political end; this gets to the heart of campaign planning. Current doctrine addresses arranging operations, phasing, centers of gravity, direct versus indirect attack, decisive points, culmination and termination. Adherence to the principles of war is essential. But for what end, what military objective will achieve the political goal? Creation of conditions that threaten the survival of the opposing regime is most likely to achieve the political goal. When the enemy is faced with the dilemma of continuing the war, fearing that his regime will be destroyed or seeking peace, we would expect that he would seek peace. To achieve victory it is essential that the enemy believe his eventual destruction is assured, whether that destruction would really happen is irrelevant. It is fear in the enemy commander's mind, fear that he would be thrown from power, that his regime and way of life would be irrevocably changed, that leads to his seeking peace rather than continuing the war. Negotiations should start as early as possible to achieve the limited objectives; continuing military operations during negotiations reinforces the idea that the enemy cannot win.

Victory can be achieved by attacking any and all of Clausewitz's trinity of "first ... the people; the second the commander and his army; the third the government."¹⁰ Attack can be overt or covert and take many forms such as economic blockade or sanctions, psychological operations, diplomatic/political attack, destruction of infrastructure, as well as conventional attacks on military forces. Attack can come from internal and external sources. When the people of the country have had enough of war they can revolt and in a democratic country can use the electoral process to overthrow the government. Quick decisive victory over a country's military can compel compliance. The warring government can be

¹⁰Clausewitz, p. 89.

compelled to settle by defeat of the military directly. A war of attrition can sap the will of the people and the military. The government can evaluate the objective and conclude the cost/benefit ratio is excessive. A rational calculus calculation determines the value of the objective is not worth the cost. This cost can take many forms - i.e. lives, wealth, material and equipment, natural resources, and even the stability and survival of the government itself. An alternative way to achieve success may be to create conditions favorable for coups or revolution. Covert operations providing aid to guerrillas and insurgent groups can support revolutionary factions. Psychological operations can embolden revolutionaries, demoralize the people and threaten the government. Internal revolution can complete what started on the battlefield. Planning to achieve the political objective must consider the whole range of means available.

Technology in all its forms and applications, lethal and non lethal, enhances our ability to achieve success. The use of precision guided munitions allows the United States to more easily threaten the survival of the enemy regime. The application of lethal force in war has become more surgical and precise. No longer is destruction of the enemy's way of life with corresponding large numbers of innocent civilian casualties necessary to achieve our objective. Collateral damage can be reduced as the effects of precision weapon systems are directed to destroy specific buildings, facilities, capabilities, materiel, infrastructure, air and air defense systems, command control and communications systems, weapon systems and support capabilities. Targeting developed during the pre-hostility period and executed during the war allows us to threaten and destroy the enemy. Joint operations that achieve a synergy of action with complementary effects will continue to be important as the enemy is defeated before he can react to ongoing operations. Modern technology allows the United States to win limited wars in a

more effective and efficient manner, before exceeding our culminating point. Adherence to the Bismarckian fundamentals of limited war is essential.

Can we fail in limited war? Without a doubt, we could easily lose if we start operations without a clear understanding of what we wanted to achieve. If during the conflict, we lost sight of the objectives, changed objectives in mid course, with an inappropriate military strategy changed the nature of the war, lost political control of the military with subsequent military escalation of means and ends, and lost support of the people we could create conditions that allow the force to exceed its culminating point resulting in prolonging the war and subsequent defeat. Battlefield success frequently leads to changing objectives during war. As objectives change a different strategy and organization are required. Often that new strategy and organization are not available nor even recognized as a requirement because mission creep occurs incrementally as the military achieves its missions. Unfortunately there is normally no reassessment of the ways and means required to accomplish these new ends. Thus, exceeding the culminating point and subsequent mission failure can be expected. Examples of success, changing initial objectives, and then exceeding the culminating point are demonstrated by United States forces in Korea in 1950 and Iraqi forces in 1990-91.

Campaign planning defines those military objectives that must be achieved to accomplish the political purpose. Campaign planning allocates sufficient military force used in sequential operations in a manner that achieves the requisite military objectives. What is often missing in campaign planning is the link between military and political objectives. Understanding how military objectives achieve the political objective is the key element in military strategy, operations and campaign planning. I have argued that in limited war the surest road to victory is one that

threatens the survival of the opposing state. Campaign planning must focus the application of every element of national power on achieving conditions that cause the opposing leader to fear for his survival. Extensive use of psychological operations, brute force against his centers of gravity, destruction of infrastructure, disruptions of normal life are all effective. The government, the people and the military can all threaten survival of the enemy regime. A campaign plan that threatens the leaders hold on power will be most effective in achieving political victory in limited war.

Achieving success before reaching culmination requires a campaign plan that clearly defines the military conditions and objectives desired and that achieves the political objective. Identification of requisite units is essential to organizing and sequencing the application of force to achieve the desired result, and becomes the campaign outline. Joint Pub 3-0 provides considerations and a framework to prevent operations from exceeding the culminating point when building a campaign plan. What it does not provide is the political aspects and reasons for military operations. Current doctrine does not deal effectively with identifying military results that achieve political ends. The military condition that seems to provide a universal result is one that threatens the survival of the enemy regime.

Modern war is often limited in nature, scope, and means employed. War does not need to be total to threaten the enemy's survival. However, success will be most rapidly achieved using Bismarck's fundamentals of limited war: isolate your adversary politically; establish firm political control over the military; establish and maintain limited objectives even in the face of overwhelming victory; and achieve quick military victory. The political objective can be forced on the enemy most easily by creating military conditions that threaten his survival. This apparent

contradiction of limited war with use of a total threat is a paradox of modern limited war. Technology makes military and political victory achievable without destruction of the enemy nation. Developing a campaign plan that threatens survival of the enemy regime is the most effective objective of military operations while assuring we don't exceed our culminating point. Winning is therefore defined in terms of accomplishing the political objective. We can do this using force short of total military victory by quick decisive victory, rational calculus, or by establishing regime threatening conditions.

Bibliography

- Brodie, Bernard. War and Politics. New York: Macmillan, 1973.
- Clausewitz, Carl Von. On War, Princeton: Princeton University Press, 1984
- Craig, Gordon A. The Politics of the Prussian Army 1640-1945. New York: Oxford University Press, 1978. Chaps. 4-5.
- Hall, George M. "Culminating Points," Military Review, July 1989, pp. 79-86.
- Holborn, Hajo. A History of Modern Germany, 1840-1945, Vol. 3. Princeton: Princeton University Press, 1982.
- Ikle, Fred Charles, Every War Must End, New York: Columbia University Press, 1971.
- Izzo, Lawrence L. "The Center of Gravity is not an Achilles Heel," Military Review, 1988, pp. 72-77.
- Joint Pub 3 -0. Doctrine For Joint Operations, U.S. Government Printing Office, 1993.
- Keaney, Thomas A. and Cohen, Eliot A., Gulf War Air Power Survey Summary Report
- MacDonald, Callum A. Korea The War Before Vietnam. New York: The Free Press, 1986.
- Mendel, William H. and Tooke, Lamar "Operational Logic: Selecting the Center of Gravity," Military Review, June 1993, pp. 3-11.
- Smoke, Richard. War: Controlling Escalation. Cambridge: Harvard University Press, 1977.
- Summers, Harry G. Jr., On Strategy II, A Critical Analysis of the Gulf War, New York: Dell Publishing, 1992
- Vego, Milan N. "Fundamentals of Operational Design," Newport RI: Naval War College, January 1995.